Part 7.1

In the function malloc_or_exit, check if the number of bytes required is 0 before calling malloc. If so, exit immediately.

Part 7.2

No, the program will not print 4 lines because at the third step, the required number of bytes is 0. As we defined in previous part, this will result in the termination of the program at step three.

Part 7.3

No, the program will not run forever. Because we never free the memory, the process will end up running out of its virtual memory. One allocation will eventually fail, causing the termination of the program.